

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018330**Date Inspected:** 22-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bonifacio Daquinag**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 7W/8W side plate 'E' (7900mm to 9955mm) inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 continuing to perform CJP groove welding fill pass on the splice butt joint. The welder was observed performing automatic welding in the 3G (vertical) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1. The joint being welded has a single V-groove butt joint with backing bar. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using Miller Proheat 35 Induction Heating System heater blankets located at the opposite side of the plate prior/during welding. ABF Quality Control (QC) Bonifacio Daquinag was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass welding of the splice joint at location mentioned above was still continuing and should remain tomorrow.

At OBG 8W/9W bottom plate 'D' inside, QA randomly observed ABF/JV qualified welders Jin Pei Wang and Wai Kitlai perform seal/fillet welding of bottom plate to backing bar. The welders were welding in 2F (horizontal) position utilizing dual shielded Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-F3200-2. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using Miller Proheat 35 Induction Heating System heater blankets located at the opposite side of the plate prior/during welding. ABF

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## WELDING INSPECTION REPORT

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Quality Control (QC) Bonifacio Daquinag was noted monitoring the welding parameters of the welder. At the end of the shift, seal welding of the bottom plate to backing bar was completed.

At OBG 8W/9W bottom plate 'D' inside, both welders Wai Kitlai and Jin Pei Wang were observed perform root pass welding at the north side (600mm long) and south side (1200mm long) respectively after completing the seal welding of the backing bar. The welders were noted welding at 1G (flat) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3040A-1. The joint being welded has a single V-groove butt joint with backing bar. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using Miller Proheat 35 Induction Heating System heater blankets located at the opposite side of the plate prior/during welding. ABF Quality Control (QC) Bonifacio Daquinag was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass welding of the splice joint at location mentioned above was still continuing and should remain tomorrow.

At OBG 8W/9W top deck plate 'A' outside, QA randomly observed ABF/JV qualified welders Xiao Jian Wan and Hua Qiang Wang perform seal/fillet welding of top deck plate to backing bar. The welders were welding in 2F (horizontal) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. The splice joint was preheated to remove the moisture from the steel plate using propane gas torch during welding. ABF Quality Control (QC) Bonifacio Daquinag was noted monitoring the welding parameters of the welder. At the end of the shift, seal welding of the top deck plate to backing bar was still continuing and should remain tomorrow.

### Summary of Conversations:

No significant conversation today.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lizardo, Joselito	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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